

Managing Bighorn Sheep and Lil' B

By Brett Wiedmann

Proper management of any wildlife species requires two necessary ingredients: field work and office work. Most biologists prefer one to the other, but a balance is most responsible and efficient.

If I had to choose between working on my computer, or spending the day in the badlands observing bighorns, the choice is obvious. However, as the management partnership between the North Dakota Game and Fish Department and the Minnesota-Wisconsin Chapter of the Foundation for North American Wild Sheep has demonstrated, data analysis regarding North Dakota's bighorn population is not only an important aspect of proper management, but fundamental.

The necessity of "computer management," with its confusing lingo and computer models, is often frustrating to biologists and sportsmen alike. However, without a scientific rationale to bighorn management, merely dumping an ever-increasing number of wild sheep into the badlands could possibly result in little more than an expensive, yet unsuccessful, experiment.

This is why the first cooperative project between Game and Fish and Minnesota-Wisconsin Chapter of FNAWS was to radio-collar 28 bighorns within North Dakota's existing herds, thereby building the foundation for future management projects. Thanks to the radio-collaring effort, we continue to gain valuable information regarding population demographics, home ranges, core-use areas, lambing areas, seasonal movements, mortality, recruitment rates, and location data that will be used to develop a computer model identifying habitat preferred by North Dakota's bighorn sheep.

While tangible results in a management partnership such as ours are sometimes slow to develop, when visible benefits do occur, it is usually the product of mundane work that preceded the occurrence. For instance, when Bruce Stillings, Department big game biologist, noticed that four ewes inhabiting an area north of Bullion Butte were never accompanied by lambs, he came to the conclusion they were probably not being bred during the rut. Perhaps the die-off that decimated the South Bullion herd in the late 1990s had affected the North Bullion herd as well.

After much thought and effort, Game and Fish biologists decided to transplant two rams and three ewes from the Long X herd to the North Bullion herd in February 2002. And to our delight, each of the three transplanted ewes gave birth to healthy lambs the following spring, whereas the resident ewes were once again observed without lambs, supporting our assumption that they had not been bred during the previous year's rut.

As summer of 2002 progressed, I was encouraged that the three lambs were still alive and doing well, and that the three ewes that hadn't been bred for a few years, would be during the upcoming rut. With two rams, six ewes and three lambs, the future for the North Bullion herd looked promising. However, things were about to become even more interesting.

In October, while collecting location data from an airplane, I was encouraged to see the three North Bullion lambs appeared healthy and were nearly the size of their mothers. After recording the desired data we began to head for another herd when I noticed a small, gray fur ball standing next to one of the ewes. Amazingly, it appeared to be a newborn lamb, nearly four months after the lambing season.

Bullion Butte



North Dakota Game and Fish Department personnel have been managing California bighorn sheep since 1956 when the animals were introduced into the badlands.



When transplanting or relocating bighorn sheep, the animal's wellbeing is the biologist's biggest concern. Sheep are blindfolded in hopes the animal will calm down, reducing risk of injury during handling.

After landing, and still unsure of what I had actually seen, I jumped into my pickup and headed to North Bullion for a closer look. After locating the herd, I was once again bewildered when I saw the tiny lamb bedded next to one of the ewes. Because the ewe did not have a radio-collar, I was positive she was not one of the transplanted sheep. The two Long X rams transplanted into the North Bullion area the previous winter must have induced this resident ewe into estrus months after the normal rut. Because she was bred so late, the ewe gave birth in mid-September, nearly four months after the three other lambs.

In honor of Bruce's hard work the previous year, I immediately named the tiny lamb Lil' B. While watching him, perched on a small outcropping and harassing older lambs nearly three times his size and sporting thick winter coats, I assumed Lil' B had almost no chance of surviving the approaching winter. Lacking stored fat, thick coat or adequate body mass, he would certainly bend to the mercilessly harsh

winter weather that pushes even the hardiest bighorns to the limits of survival.

Surprisingly, two months later I again observed Lil' B harassing the older lambs, as usual, and seemingly oblivious to minus-20 degree temperatures and bone-chilling winds, proving how tough these animals actually are.

Poor little guy, I thought, the indifference to his predicament would only hurt his chances of survival. He still had three long months ahead, but seemed determined to squander his meager energy supply by playing with the older lambs that knew better than to burn precious fat unnecessarily. Lil' B will never make it.

Well, in April, as the almost forgotten sun began warming the badlands' frozen clay banks, there he was, standing on a large rock, leg-kicking the top of his mother's back. Emboldened by two tiny sprouts atop his head, Lil' B was seemingly obsessed with being the highest-ranking member of the band. He couldn't have proven me more wrong. That tiny lamb, born four months



Many bighorn sheep over the years have been hauled in special stock trailers from Canada and elsewhere before being released in western North Dakota. The latest effort was in 2003 when 26 bighorns were transplanted from Oregon to North Dakota.



too late, had somehow managed to survive the long winter when most lambs, given every advantage by being born in spring, do not.

This brings me back to my original thought: Lil' B, a visible accomplishment and success story of our management partnership, is the direct result of field observation, office data analysis, and dedication from biologists and sportsmen who simply love bighorn sheep. Every time I see Lil' B, usually roughing-up some unfortunate member of his herd, I think of him as a vivid symbol of the success of the partnership between Game and Fish and the Minnesota-Wisconsin Chapter of FNAWS. The results being nothing short of Lil' B himself, the little lamb that shouldn't have been.

Perhaps, in seven years or so, Lil' B's tiny lamb tips will have developed into an impressive set of broomed horns, and he'll take his rightful place among the proud monarchs of North Dakota's badlands.

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Craig Blirle

Managing Bighorns Through Teamwork

Following a severe bighorn sheep die-off during the late-1990s south of Interstate 94, in extreme western North Dakota, the North Dakota Game and Fish Department entered a management partnership with the Minnesota-Wisconsin Chapter of the Foundation for North American Wild Sheep in 1999. In addition to funding a full-time biologist, Minnesota-Wisconsin FNAWS has funded several other management projects during the past several years:

2000

Twenty-eight bighorns within seven herds were fitted with radio-collars. The telemetry information gathered has been instrumental in more effectively managing North Dakota's sheep population.

2001

Nine sheep, including three rams and six ewes, were transplanted from the Long X herd, located near the North Unit of Theodore Roosevelt National Park, to an area south of Bullion Butte. The South Bullion herd was hardest hit by the late '90s die-off and received highest priority for reintroduction. Since the transplant in January 2001, the South Bullion herd has increased from a single ram to more than 20 animals.

2002

Five bighorns, including two rams and three ewes, were also transplanted from the Long X herd to an area north of Bullion Butte. Apparently, the die-off that decimated the South Bullion herd had also severely cut into the North Bullion population, and by December 2001, only four ewes remained. However, since the North Bullion transplant, the herd has grown from only three ewes in 2002 to 16 animals.

2003

Twenty-six bighorns, including eight rams and 18 ewes, were transplanted from Oregon to North Dakota. Thirteen animals were released north and 13 south of I-94 near Buckhorn Creek and Kendley Plateau. Although five of the transplanted sheep died of capture-related stress and two died from other causes, the remaining animals have fared well during their first year in North Dakota, as three of the Buckhorn Creek ewes successfully reared lambs. Hopefully, the Oregon sheep will have even better success in 2004 now that they have further acclimated to their new surroundings.

Since teaming with the Minnesota-Wisconsin group, North Dakota's bighorn population in the badlands has increased by more than 50 percent since 1999.

